Big Creek Water Right Lease Renewal

DECISION NOTICE

Montana Fish, Wildlife & Parks
March 2008

Proposed Action

Montana Fish, Wildlife and Parks is proposing to renew an existing water right lease on Big Creek, a tributary to the Yellowstone River near Emigrant. FWP currently leases 10 cubic feet per second (cfs) and proposes to continue leasing 10 cfs. Big Creek provides substantial Yellowstone cutthroat fry recruitment to the Yellowstone River and is vital to maintaining Yellowstone cutthroat populations. The Future Fisheries Improvement Program is proposing to provide 61% of the funding for the water right lease with the remainder coming from other FWP sources.

Montana Environmental Policy Act

Montana Fish. Wildlife & Parks is required by the Montana Environmental Policy Act (MEPA) to assess significant potential impacts of a proposed action to the human and physical environment. In compliance with MEPA, an Environmental Assessment (EA) was completed for the proposed project by FWP and released for public comment on January 22.2009.

Public comments on the proposed project were taken through March 4, 2009. Notice of the Draft EA was sent to 25 individuals and groups with 3 full copies of the Draft EA mailed to individuals and groups requesting them. The Draft EA was posted on the FWP webpage: http://fwp.mt.gov//publicnotices/

Summary of Public Comment

Public comments or inquiries were received during the review period. The comments and responses are categorized following.

General Comment in Support

Comment "We are supportive of the intent of the project and wish to see it completed as scheduled."

Response: Thank you for your comment in support.

Lease Value Comments

Comment: "Page 1. Item II. Paragraph 2. We are uncertain as to how this 20 year lease interfaces with the Lease currently proposed for renewal. It is difficult to understand how a project costing $228,640, over $11,000 per year. that results in -"significantly increase water demand" and yields a guaranteed 1 cfs of water can be considered beneficial for cutthroats. Is the "significantly increase the total water demand" statement in error? If it is correct, we would be pleased to learn how changing from, we presume, Rood irrigation to gravity sprinkler results in increased water use."

Response: The word "increase" is in error. It should be "decrease". This section of the EA is corrected below.

Comment: "It would also be of interest to understand how 1 cfs of instream flow might be either useful or cost effective at a price of $11,000 per year."

Response: The existing 20-year lease is not subject to the decision at hand. It will remain in effect through its full term and is not subject to revision under the present decision.

However, some additional explanation is warranted. FWP's experience in water leasing is that reducing potential conflicts between water users on a lease stream is critical to the overall success of leasing. Even though water commissioners can be used to enforce water rights including instream leases, FWP's experience with water commissioners is that they do not react quickly enough to prevent damage to the fishery. For this reason it is crucial that water users on stream accept an instream lease and voluntarily honor the lease. The 20-year lease on Big Creek has served to greatly reduce irrigation water demand and potential conflicts between water users including FWP, allowing the 10-year lease subject to renewal to reliably provide 10-cfs of instream flow.

Lease Monitoring Comments

Comment: "Page 1. Item II. Paragraph 3. Reference is made to flow monitoring in Big Creek below the diversion. How were those flows measured? Only a constant monitoring device properly placed and maintained would offer assurance that flow regimes leased were in fact delivered."

Response: Since the inception of water leasing on Big Creek, FWP has contracted with the U.S. Geological Survey to maintain a staff gauge and provide a rating table for the staff gauge. During the first 6 years of the lease the local water users and FWP monitored this staff gauge periodically to ensure that the leased flow rates were being provided at the measurement point below the main irrigation diversion.

In 2005 FWP began continuous monitoring at the measuring point using an Aquarod® water level logger which records water levels every 30 minutes. FWP staff measures streamflows on a monthly basis and more often if needed to maintain an accurate stage-discharge relationship for the staff gauge and water level logger. Discharge measurements are made with a current meter using U.S. Geological Survey protocol. The U.S. Geological Survey continues to provide an updated rating table and 3 stream flow measurements per year that FWP staff uses to confirm and adjust their own data. During times of low flow or when flows are expected to develop FWP provides several of the local water users with updated information with regard to the stage-discharge relationship so that the water users can make adjustments to irrigation diversion to assure that the instream flow lease is met.

Comment: Page 2. Paragraph 2. The conclusion that flows from Big Creek can be accurately derived from comparison of Yellowstone flows at Corwin Springs and Livingston seems unwarranted. This is a distance of over 50 river miles. No information seems to be available to document withdrawals for irrigation, other sources of inflow, etc. The information presented show an August flow increase of some 225 cfs between the two gauges. It seems inappropriate to attempt to assess the 10 cfs that may have been contributed from Big Creek from the other 200 plus cfs originating elsewhere.

Response: The EA did not attempt to derive the exact flow in Big Creek from the comparison of flows in the Yellowstone River. It used this comparison to assess the general hydrologic conditions in the basin between the two stream gauges on the Yellowstone River. These general hydrologic conditions would be expected to reflect general conditions for Big Creek as well. As actual stream flow data for Big Creek above the main irrigation diversions does not exist for the time period analyzed, only estimates could be made. If FWP were to expend the resources for additional hydrologic analysis of expected flows in Big Creek, the analysis would likely rely heavily on actual stream flow data from the Yellowstone River. Such an analysis would also have a substantial error associated with it. While such an analysis would provide a more detailed assessment than that undertaken by FWP, the associated error with such an analysis would not provide sufficient confidence in the data to justify the expenditure.

Comment: Page 2. Paragraph 3. Data on redd numbers and out-migrant fry counts are extremely limited. Given the $13,000 annual cost, it would not seem unreasonable to have collected more data regarding the return on that investment as measured by cutthroat fry leaving the natal stream. Determining the species of out-migrant salmonid fry apparently has not been undertaken. Asserting the benefits to cutthroat in the absence of fry species identification seems unwarranted.

Response: Fry monitoring has been limited in the past mainly as a result of limited resources. Prior to the lease Big Creek would dewater and go completely dry on the lower end. With the lease in place flows are maintained year round and benefit all species of trout, including Yellowstone cutthroat, that use it for spawning. Species identification of fry is extremely difficult in the field and would require sacrifice of captured fish for examination and identification in a lab setting. Your comment is appreciated and will be considered in developing future monitoring of the Big Creek lease.

Comment: Page 3. Paragraph 2. "With the lease in place redd counts have increased and fry production has significantly increased." Where are the data supporting these assertions? The table on the preceding page displays redd counts for 4 years, two of them prior to the lease agreement and two post-leasing. These are hardly sufficient numbers to justify the "redd counts have increased" statement. The second assertion, "fry production has significantly increased" is even less defensible since there appear to have been only two efforts to ascertain fry numbers; one before and one after the lease was in place. No mention of how fry migration was measured is presented. Were these estimates or actual counts? How were the numbers generated and the sampling carried out? The statement "fry trapping has been purposely limited as it results in the mortality of a significant number of fry" is puzzling. One must wonder how trapping was done? Surely only a

small percentage of the streamflow entered the traps and the duration of the trapping effort seems unlikely to have been extended throughout the period when fry movement might have been expected. Further, what constitutes a "significant number of fry" when there are no data on which to base an estimate of total fry out-migrating? And finally in that regard, are all cutthroats leaving Big Creek and entering the Yellowstone doing so as fry? Are other age classes also moving downstream to the river? Of those cutthroats moving into the river, what percentage originate in the 1.4 miles where the water leases are in effect and what percentage are from areas above the water lease section?

Response: Fry migration numbers are actual counts of fry captured in the fry trap. For 1999 –2005, the trap was placed at the mouth of the creek and run through out the migration season. It was placed in the thalweg, which is the main migration route for fry and would capture most of the migrating fry. Fry data from 1999, 2000, and 2001 were inadvertently left off of the table. Fry collected in those years were 3,429, 11,202, and 4,249 respectively. At this time it is unknown if other age classes are migrating to the Yellowstone as well as fry. By maintaining flow through the lease older year classes of fish that may be migrating to the Yellowstone would be benefited as well as fry. It is also unknown what percentage of fish are coming from the area above the water leases. It should be noted that prior to the lease the lower end of Big Creek would completely dewater and prohibit any out migration regardless of were the fish were originating.

Related Impact Comments

Comment: "Page 5. Section VI. Item 4. Agricultural or industrial productivity. The statement, "agricultural productivity is not expected to decrease." is difficult to accept when the formerly irrigated lands are in the process of subdivision."

Response: The renewal of the water right lease will not influence whether or not the subdivision of the agricultural property will occur. The lease agreement provides for an alternate source of irrigation water from the Yellowstone River whereby agricultural production could be sustained. Agricultural productivity is not expected to decrease as a result of the water right lease although it may or may not decrease as a result of the land being subdivided.

Comment: "Page 5. Section VI. Paragraph 1. The tax base "In fact it will likely increase as the land to be irrigated from the Yellowstone River is currently being subdivided and will no longer be classified as agricultural land." Why does FWP propose to apply for a water right from the Yellowstone, thereby replacing water previously diverted from Big Creek and presumably making it available for flow enhancement under the terms of the leases, when the lands to be irrigated are being subdivided? Does FWP anticipate financial involvement with the development of the irrigation system from the Yellowstone?"

Response: The renewal of the water right lease will not influence the tax base. Because an alternate source of irrigation water is being provided from the Yellowstone River, the land will remain irrigated. The tax base is not expected to be influenced by the water right lease although it will likely increase as a result of the land being subdivided. The quotation in the comment above is simply a statement clarifying the likely trend in the tax base, although this trend would not be a result of the renewal of the water right lease.

The application for a new water right from the Yellowstone River was one of the terms of the agreement negotiated with one of the lessors. That lessor desired that the lands to be subdivided still be irrigated as it likely adds to the value of the property. FWP does not anticipate any financial involvement in the development of the irrigation system from the Yellowstone River.

Public Access Comment

Comment: "We must once more state our belief that access should be a part of these projects. We are aware that the Future Fisheries enabling legislation specifically eliminates public recreational access as a condition of project funding. It does not, to our knowledge, forbid efforts to secure public access nor the use of public access as an evaluative criterion in ranking project proposals for funding."

Response: Future Fisheries projects demonstrating strong public benefits, including the public benefit of access, currently are weighted above and ahead of those projects that display a weak public benefit component. However, the enabling legislation and the associated Montana Code Annotated (MCA) are very clear about not requiring public access on private property where a Future Fisheries Improvement project has been completed. MCA (87-1-272) states: "A project conducted under the future fisheries improvement program may not restrict or interfere with the exercise of any water rights or property rights of the owners of streambeds and property adjacent to streambeds, streambanks, and lakes. The fact that a program project has been completed on private property does not create any right of public access to the private property unless that right is granted voluntarily by the property owner."

Public access certainly is an important part of the definition of public benefits. However, although important, access is not exclusive to other overall public benefits. There are many examples of successfully completed Future Fisheries projects that have provided significant benefits to the public that didn't necessarily include access. These public benefits typically are directed toward downstream waters that are accessible by the public, including increased recruitment of juvenile fish, enhanced in-stream flow, greater overall channel stability and improved water quality.

Public benefits associated with proposed Future Fisheries projects, including access, continue to be important factors under consideration when both the citizen review panel and the Commission formulate funding recommendations. Administrative Rules of Montana (ARM rules) established for the Future Fisheries Program include criteria for the Department and its Commission to use in prioritizing project funding. Under ARM rule 12.7.1203, prioritizing criteria include "(a) the degree to which the project optimizes public benefits to wild fisheries." Additionally, the independent Future Fisheries citizen review panel considers public access and other public benefits in their formulation of funding recommendations to the Commission. The Future Fisheries grant application includes the question: "III.D. Will the project increase public fishing opportunity for wild fish and, if so, how?"

The focus of this project is to maintain and improve the Yellowstone cutthroat trout populations in the Yellowstone River. Resident fish in Big Creek may benefit as well. Ample fishing access exists for the Yellowstone River in this area including Point of Rock Fishing Access Site upstream of Big Creek and Emigrant and Emigrant West

Fishing Access Sites downstream of Big Creek. Anglers also have walking access to the Yellowstone River at the Department of Transportation Rest Area just upstream of Big Creek. Angling access is available on Big Creek at the Sunny Brook Springs Fishing Access Site located approximately 4 miles upstream of the mouth of Big Creek.

Final Environmental Assessment for the Big Creek Water Right Lease Renewal

The second sentence of the second paragraph in Section II of the Draft Environmental Assessment is modified as follows:

> The other lease was funded by Future Fisheries for $228,640 and provided for an extensive gravity pipeline and sprinkler system that significantly ~~increase~~ decrease the total water demand.

A point of clarification is necessary regarding the funding source for this project. Of the $155,000 begin provided from the Future Fisheries Improvement Program, $24,000 is funds carried over from the previous Future Fisheries grant for this Big Creek Lease.

The Draft Environmental Assessment as modified by the preceding, together with this Decision Notice, will serve as the Final Environmental Assessment for this proposal.

Decision

Based on the Environmental Assessment and public comment it is my decision to proceed with the renewal of the Big Creek Water Right Lease under the terms described in the Environmental Assessment.

I find there are no potentially significant impacts on the human and physical environments associated with this project.

Chris Hunter 3/5/09

Chris Hunter Date
Chief of Fisheries